

## DECISION RECORD

Decision: It is my decision to authorize the issuance of a ten year grazing lease to Tom and Bettie Corn for Allotment #64020. The lease will be for 265 AUs at 74% FR from March 1 to the end of February. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed action were considered and any necessary changes have been incorporated into the environmental assessment.

The fundamentals of rangeland health are identified in 43 CFR §§4180.1 and pertain to watershed function, ecological processes, water quality and habitat for threatened and endangered species and other special status species. Based on the available data and professional judgement, the evaluation by this environmental assessment indicates that the conditions identified in the fundamentals of rangeland health exist on the allotment.

If you wish to protest this proposed decision in accordance with 43 CFR §§4160.2, you are allowed 15 days to do so in person or in writing to the authorized officer, after the receipt of this decision. In the absence of a protest, this proposed decision will become the final decision of the authorized officer without further notice, in accordance with 43 CFR 4160.3. Please be specific in your points of protest. A period of 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final, is provided for filing an appeal and petition for the stay of the decision, for the purpose of a hearing before an Administrative Law Judge (43 CFR 4.470).

The appeal shall be filed with the office of the Field Office Manager, 2909 West Second, Roswell, NM, and must state clearly and concisely your specific points.

Signed by T. R. Kreager  
Assistant Field Manager

8/9/99  
Date

**Environmental Assessment for Grazing Authorization  
Allotment #64020  
EA# NM-060-99-017**

**Roswell Field Office  
Bureau of Land Management  
2909 West 2 nd  
Roswell, NM 88201**

**T7S R22E, T7S R23E, T8S R22E, T8S R23E various sections**

## **I. Introduction**

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing permit on allotment #64020.

### **A. Purpose and Need for the Proposed Action**

The purpose of issuing a new grazing permit would be to authorize livestock grazing on public range on this allotment. The permit would specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR §§4130.3, 4130.3-1, and 4130.3-2.

### **B. Conformance with Land Use Planning**

The Roswell Resource Management Plan/Environmental Impact Statement (October 1997) has been reviewed to determine if the proposed action conforms with the land use plan's Record of Decision as required by 43 CFR 1610.5-3. The proposed action is consistent with the RMP/EIS.

### **C. Relationships to Statutes, Regulations, or Other Plans**

The proposed action and alternative is consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (CWA)(33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management and Executive Order 11990, Protection of Wetlands.

## **II. Proposed Action and Alternatives**

**A. Proposed Action:**

The proposed action is to authorize to the Tom and Bettie Corn Trust a grazing permit on allotment # 64020 for 265 Animal Units (AU's). This equates to 3192 Animal Unit Months (AUM's) in active use at 74% public land. Grazing will be authorized from March 1 thru the last day of February of each year. The classes of livestock include cattle, sheep, and horses. There are no projects planned for this allotment at this time. Any subsequent projects will have a site specific analysis conducted at that time.

**B. No Permit authorization alternative:**

This alternative would be not to issue a new grazing permit. There would be no livestock grazing authorized on public land. The No Grazing alternative was considered, but not chosen in the Rangeland Reform Environmental Impact Statement (EIS) Record of Decision (ROD) (p. 28). The elimination of grazing in the Roswell Field Office Area was considered but eliminated by the Roswell RMP/ROD (pp. ROD2).

**III. Affected Environment****A. General Setting**

Allotment #64020 is located in Chaves county about 15 miles north of Roswell. The allotment consists of 5 pastures. This allotment contains 13,746 acres, 10,223 acres of which are federal. The landscape is comprised of rolling hills bisected by Rock House Canyon.

This allotment is located within the Grassland and Pinon-Juniper vegetative communities as identified within the Roswell RMP. The distinguishing feature for the grassland community is that grass species typically comprises 75% or more of the potential plant community. Short-grass, mid-grass, and tall-grass species may be found within this community. The community also includes shrub, half-shrub, and forb species. The percentages of grasses, forbs, and shrubs actually found at a particular location will vary with recent weather factors and past resource uses.

The following resources or values are not present or would not be affected: Prime/Unique Farmland, ACEC's, Minority/Low Income Populations, Wild and Scenic Rivers, Hazardous/Solid Wastes, Wetlands/Riparian Zones, Floodplains. Native American Religious Concerns. Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities. The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

**B. Affected Resources**

1. Soils: The soil present within this allotment belong to the following general mapping unit:

Ector: Are shallow, well drained soils on ridges and hills

Caliche lays under most of these soils at various depths. Limestone is the parent material. For more information, refer to Soil Survey of Chaves County New Mexico, Northern Part. There is a certain amount of erosion that occurs naturally in this vegetation community. High winds in the spring and high intensity thunderstorms are the primary agents of soil transportation.

2. Vegetation: This allotment is within the grassland and pinon-juniper vegetative community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Vegetative communities managed by the Roswell Field Office are identified and explained in the RMP/EIS. Appendix 11 of the draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community.

There are 4 dominant ecological (range) sites on the allotment - Shallow CP-4, Loamy SD-3, Limestone hill CP-4, and Limestone hills SD-3. Range site descriptions are available for review at the Roswell BLM office or any Natural Resources Conservation Service office.

There are 5 vegetative monitoring study sites on this allotment. Monitoring information has been collected in 1983, 1988, 1993. Analysis of the monitoring data indicates range condition is fair and trend is static. Multiple resource objectives are being met and with a 45% use factor, there is sufficient forage remaining for the proposed number of AUs. The percent bare ground and rock found on the allotment fall within the parameters established by the RMP/EIS for this vegetative community. Copies of the monitoring data and the analysis of the data is available at the Roswell Field Office.

This allotment has been accepted into the Ranch Stewardship Incentive Program run by the New Mexico State Land Office. The rangeland must be in good condition or better in order to qualify for the program.

The following table summarizes monitoring data for the allotment:

Monitoring Data Summary (Grassland Community), Allotment Averages							
	G r a s s e s	Forbs	Shrubs	Trees	Litter	Bare Grou nd	R o c k s

Percent composition of vegetative cover	94.62	0.22	4.58	0.33	N/A	N/A	N / A
Percent Ground Cove	7.97		2.48		13.16	16.00	30.42

Monitoring Data Summary (Pinon-Juniper Community), Allotment Averages							
	Grasses	Forbs	Shrubs	Trees	Litter	Bare Ground	Rocks
Percent composition of vegetative cover	95.73	0.67	3.61	0.00	N/A	N/A	N/A
Percent Ground Cover	41.75		1.34		5.68	11.78	39.46

3. Wildlife: This allotment is located within the Macho Wildlife Habitat Area (WHA). The Macho Habitat Management Plan (HMP) was completed in 1986, with the primary objective of providing suitable pronghorn antelope habitat within the WHA by maintaining current quality habitat areas and improving those habitats that are in poor or fair condition. A second objective is to improve the overall distribution of antelope where possible.

Game species occurring within the area include mule deer, mourning dove, and scaled quail. Raptors that utilize the area on a more seasonal basis include the swainson's, red-tailed, and ferruginous hawks, American kestrel, and greathorned owl. Numerous passerine birds utilize the grassland areas due to the variety of grasses, forbs, and shrubs. The most common include the western meadowlark, mockingbird, horned lark, killdeer, loggerhead shrike, and vesper sparrow.

The warm prairie environment supports a large number of reptile species compared to

higher elevations. The more common reptiles include the shorthorned lizard, lesser earless lizard, eastern fence lizard, coachwhip, bulisnake, prairie rattlesnake, and western rattlesnake.

A general description of wildlife occupying or potentially utilizing the proposed action area and associated Habitat Management Areas refer to the Affected Environment Section (p. 3-62 to 3-71) of the Draft Roswell RMP/EIS (9/1984).

4. Threatened and Endangered Species: There are no known resident populations of threatened or endangered species on the allotment. A list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (AP1 1-2). Of the listed species, avian species such as the bald eagle and peregrine falcon may be observed in the general geographic area during migration or winter months. There are no known records of these species having occurred on the allotment. There are no designated critical habitat areas within the allotment.

5. Livestock Management: The allotment is grazed by sheep, cattle, and horses. The latest grazing permit was for 265 AUs. Actual livestock numbers on the allotment may be less than the active use depending on vegetative and economic conditions.

This allotment has 5 pastures. A pasture may occasionally be rested during the growing season. The typical method of use is to change classes of livestock in a pasture. Therefore a pasture may be grazed by cattle in one year, and the following year grazed by sheep. The sheep graze differently than the cattle and the type of forage used is different also.

6. Visual Resources: The allotment is located within a Class IV Visual Resource Management area. This means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

7. Water Quality: No perennial surface water is found on this allotment. Rock House Canyon is an ephemeral drainage which crosses the allotment. There is a water well on federal land along with several dirt tanks which hold water for varying periods after sufficient rainfall.

8. Air Quality: Air quality in the region is generally good. The allotment is in a Class 11 area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act. Class 11 areas allow a moderate amount of air quality degradation.

9. Recreation: Since this allotment has no facility based recreational activities, only dispersed recreational opportunities occur on these lands. Recreational activities that occur include hunting, caving, sightseeing, Off Highway Vehicle Use, primitive camping, horseback riding and hiking.

Legal and physical Access to public lands located in this allotment are through state lands and county maintained roads. Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

10. Cave/Karst: The public lands within this allotment have been designated, "High cave and Karst potential". A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment and at the present time, no known significant caves or karst features have been identified. There will be no further discussion of this resource.

#### **IV. Environmental Impacts**

##### **A. Impacts of the Proposed Action**

1. Soils: Livestock remove the cover of standing vegetation and litter, and compact the soil by trampling. These effects can lead to reduced infiltration rates and increased runoff. Reduced vegetative cover and increased runoff can result in higher erosion rates and soil losses, making it more difficult to produce forage and to protect the soil from further erosion. These adverse effects can be greatly reduced by maintaining an adequate vegetative cover on the soil. Ongoing vegetation studies conducted on the allotment indicate that, at the level of grazing identified in the proposed action, the percent bare ground and rock found on the allotment fall within the parameters established by the RMP/EIS for this vegetative community. Proper utilization levels and grazing distribution patterns are expected to retain sufficient vegetative cover on the allotment as a whole and this will maintain the stability of the soils. Soil compaction and excessive vegetative use will occur at small, localized areas such as drinking locations, along trails and at bedding areas. Positive affects from the proposed action include the speeding up of the nutrient cycling process and chipping of the soil crust by hoof action.

2. Vegetation: Vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores. The area has been grazed by livestock since the early part of the 1900's, if not longer. Ecological condition and trend is expected to remain stable and/or improve over the long term at the permitted number of livestock. Vegetation monitoring indicates that multiple resource objectives will continue to be met and that there will be sufficient forage left for the number of proposed livestock.

3. Wildlife: Wildlife will continue to compete with domestic livestock for forage and browse. Cover, and other habitat requirements for wildlife will remain the same as the existing situation. With proper utilization levels there will be adequate cover and forage for wildlife species; resulting in sustainable wildlife populations for those species that occupy the area. Maintenance and availability of existing waterings will continue to prove a dependable water source for wildlife, as well as livestock.

4. T&E species: Livestock grazing, as a result of issuance of the grazing permit, may affect, but not likely adversely affect the bald eagle. It is expected that habitat and range condition would be maintained or improved by authorizing grazing conducive with vegetation goals for watershed and wildlife habitat. Habitat for

wintering bald eagles would not be negatively impacted by livestock grazing. There would be no effect to the peregrine falcon as important riparian habitat or potential nest sites are not found on the allotment. No occupied or historic nesting habitat occurs within the allotment or within 3400 meters (2.1 miles) of the exterior allotment boundary.

5 Livestock Management: Livestock would continue to be grazed under the same management system and the same numbers in accordance with the livestock use agreements signed in 1988 and 1994. Actual livestock numbers may be less than the active use depending on vegetative and economic conditions. No adverse impacts are anticipated.

6. Visual Resources The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

7. Water Quality -. The drainages on the allotment are ephemeral, so direct impacts to surface water quality would be minor, short-term impacts during stormflow. Indirect impacts to water-quality related resources, such as fisheries, would not occur. The proposed action would not have a significant effect on ground water. Livestock would be dispersed over the allotment, and the soil would filter potential contaminants.

8. Air Quality: Dust levels under the proposed action would be slightly higher than under the no grazing alternative due to allotment management activities. The levels would still be within the limits allowed in a Class 11 area for the Prevention of Significant Deterioration of air quality.

9. Recreation: Grazing should have little or no impact on the dispersed recreational opportunities within this allotment, since the recreational use of these public lands are relatively low. The evidence or presence of livestock can negatively affect visitors who desire solitude, unspoiled landscape views or hike without seeing signs of livestock. However, grazing can benefit some forms or recreation, such as hunting, by creating new water sources for game animals.

## **B. Impacts of the No Livestock Grazing Alternative.**

1. Soils: Soil compaction would be reduced on the allotment around old trails and drinking troughs and there would be a small reduction in soil loss on the allotment.

2. Vegetation: It is expected that the number of plant species found within the allotment will remain the same, however, there would be small changes in the relative percentages of these species. Vegetation will continue to be utilized by wildlife. There would be an increase in the amount of standing vegetation.

3. Wildlife: Wildlife would have no competition with livestock for forage and cover.



There would be no maintenance of livestock waters. As these waters became inoperable, water availability could become a critical limiting factor for many wildlife species.

4. T&E Species: There would be little, if any, change to the bald eagle or the peregrine falcon habitat if the no grazing alternative is selected.

5. Livestock management: The forage from public land would be unavailable for use by the permittee. This would have a significant adverse economic impact to the livestock operation. The checkerboard land status on the allotment makes it economically unfeasible to fence out the federal land and use only the private land. It would become uneconomical for the permittee to continue an agricultural enterprise.

6. Visual Resources: There would be no change in the visual resources.

7. Water Quality: There could be a slight improvement in water quality due to the minor reductions in sediment loading during stormflow.

8. Air Quality: There would be a slightly less dust under this under this alternative versus the proposed alternative, but this would be negligible when considering all sources of dust.

9. Recreation: This alternative would be beneficial to those recreationists who desire solitude and no livestock. If livestock waters are not maintained, hunting opportunities may be reduced and this could be a negative impact to hunters.

## **V. Cumulative Impacts**

Cumulative impacts of the grazing and no grazing alternatives were considered in Chapter 4 of Rangeland Reform '94 Draft Environmental Impact Statement and in Chapter 4 of the Roswell Resource Area Proposed RMP/EIS. The no livestock grazing alternative was not selected in either document. On the allotment specific level, there will be no cumulatively significant impacts from the proposed action or from the no grazing alternative.

## **VI. Residual Impacts**

The area has been grazed by livestock since the early part of the 1900's, if not longer. Vegetative monitoring studies have shown that grazing, at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action.

## **VII. Mitigating Measures**

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

